



Water & Wastewater Treatment Equipment

Hong Kong

Market Overview

Hong Kong is a promising market for water and wastewater treatment equipment

International engineering consulting companies and equipment suppliers are participating in large-scale water quality and sewage control projects of Hong Kong Special Administrative Region (HKSAR). Contracts vary from implementing advanced filtration technology, rehabilitation of major water mains, providing consulting services to installing industrial water treatment systems. Government capital expenditure on water and wastewater treatment amounts to more than US\$300 million annually. US technology, as one of the leaders in the field, will continue to be sought after. US engineering consulting firms are doing extremely well in Hong Kong's water treatment projects. Being more familiar with US equipment, local consulting firms can help open doors for US water treatment equipment suppliers.

In addition to Hong Kong, China requires additional water and sewage infrastructure. The industry anticipates that about 70 percent of these mainland projects will be funded by foreign investments. Companies in Hong Kong have already gained the trust of and have a good reputation among Chinese government authorities. US equipment suppliers should, therefore, consider setting up strategic partnerships with Hong Kong based companies to tap into the vast China market.

U.S. Position and Competitors

Role of Consulting Companies

Equipment suppliers interested in this market normally maintain an excellent working relationship with engineering consulting firms that are active in Hong Kong's water projects to obtain up-to-date project information and equipment requirements. Normally, a water and wastewater project involves a feasibility study, design, project management, construction and equipment installation. The Hong Kong Government purchases equipment and services through a competitive bidding process. Normally, the engineering consulting company winning the detailed design contract will manage the whole project including specifying equipment requirements. There are several international engineering consulting firms active in Hong Kong's water projects, including Camp, Dresser & McKee International (CDM), Black & Veatch (formerly Binnie Black & Veatch), Maunsell, Ove Arup & Partners Hong Kong Limited and Scott Wilson. Local companies, such as ATAL, act as sub-contractors.

U.S. consulting firms have won many water treatment contracts with the Hong Kong Government. CDM was the consultant for the US\$75 million Ngau Tam Mei Water Treatment Plant, which utilizes ozone generators, biological and membrane filtration technologies. Black & Veatch is carrying out a pilot trial for the next phase of HATS for secondary treatment – compact non-BAF (biological aerated filtration) technology of effluent prior to discharging into Victoria Harbor. External partners of this project include Thames Water and Severn Trent.

U.S. Market Position

U.S. water treatment products have a good reputation in Hong Kong in terms of quality and leading technology. U.S. engineering firms have captured over 40% of the consulting contracts for water treatment projects in Hong Kong. State-of-the-art US equipment is in a favorable position to compete in Hong Kong. US Filter (now a subsidiary of Vivendi) has installed chlorine scrubber system at five water treatment plants in Hong Kong; and Osmonics has supplied many filtration equipments.

Third-Country Imports

Cutting-edge technology providers are able to participate in Hong Kong's water and wastewater treatment projects. Trojan Technologies, a Canadian based company, has sold US\$12 million worth of UV disinfection systems to Hong Kong. Another Canadian filtration technology pioneer, Zenon, is well positioned to compete in Hong Kong as soon as there are concrete plan to use membrane bioreactors. Japan has been participating in Hong Kong's water treatment projects for several decades. Recently, Mitsubishi Rayon provided hollow fiber membranes for wastewater treatment.

Best Sales Prospects

With water quality deteriorating and an increasing awareness of environmental protection, Hong Kong is utilizing and assessing various advanced filtration technologies to improve the quality of potable water and to reduce wastewater pollutants. These water treatment technologies include micro- to nano-filtration, membrane technologies, reverse osmosis and UV disinfection technologies.

Filtration

Conventionally, Hong Kong uses sedimentation process in its fresh water treatment. With improving technology, Sham Tseng Water Treatment Plant has now adopted a technique of water clarification called Dissolved Air Flotation (DAF); Ma On Shan Plant now uses membrane filtration technique. The new Ngau Tam Mei Water Treatment Plant won the American Academy of Environmental Engineers (AAEE) Award by being the first in the world to utilize dual-stage biological filtration with granular activated carbon to remove ammonia.

Disinfection

The Government is currently investigating several disinfection technologies including ultra-violet irradiation, ozonation, chlorination/de-chlorination and membrane filtration. A number of criteria must be met when making a decision, such as performance level, undesirable disinfection by-products, land requirement for the installation, and running costs. One of the territory's sewage treatment plants has installed a large ultra-violet (UV) disinfection system to destroy microorganisms such as E. Coli. The Stonecutters Island Wastewater Plant employs ozone disinfection, a technology with no undesirable by-products.

Desalination

Desalination technology is not new to Hong Kong. The territory's first desalination plant (managed by a UK firm and with Japanese equipment) opened about three decades ago. Owing to high operating costs, the plant was decommissioned. With desalination technology becoming more cost competitive, in 2001, the Water Supplies Department conducted a feasibility study on the development of desalination facilities. The study identified reverse osmosis (RO) as being the most suitable technology in terms of cost efficiency and effectiveness.

Water conservation, re-use and recycling

Water conservation can help reduce the pressure of fresh water demand generated by a population increase. Hong Kong is looking for measures to implement water loss control technologies in order to control waste. For instance, replacement and rehabilitation of water mains is a recent Government initiative toward controlling water loss. With water recycling technologies maturing and with the reduction in the supply of fresh water, government authorities worldwide, including those in Hong Kong, are looking at alternatives.

Laboratory equipment and instruments

The Water Supplies Department monitors fresh water quality throughout the entire supply system with examination of chemical, bacteriological, biological, and radiological contents in water samples to ensure the quality complies with the drinking water quality guideline recommended by the WHO. Currently, there are more than 100 testing parameters and the Department performs 150,000 tests a year. In the next couple of years, WHO will be setting new guidelines, which translate to new testing parameters, and hence, a demand on new testing instruments.

Commercial Opportunity

Privatization

Faced with a structural deficit, the Hong Kong Government has been trying to privatize its public services. The Mass Transit Railway Corporation – an underground transportation company owned by the Government but operating under commercial principles – has been partially privatized. Water privatization has been discussed and should be a future consideration of the Government.

Market Access

No Import Tariff or Duties

Hong Kong is a duty free port. There are no barriers to the import of water treatment equipment to Hong Kong.

Government Tenders

The U.S. Commercial Service at the U.S. Consulate General in Hong Kong regularly reports on government tenders. These reports are available via the National Trade Databank (NTDB). For information, call the U.S. Department of Commerce at 1-800 stat-usa.

Working with Local Agents / Distributors

For smaller-scale industrial wastewater treatment equipment, it is advisable to use an agent or distributor to penetrate the Hong Kong market. It is also an excellent way of minimizing the initial investment in the market. Working with agents and distributors in Hong Kong is very much like working with an agent in the United States. Hong Kong has no special legislation regarding agents and distributors. Virtually anything that both sides can agree to and put into a written contract is acceptable and enforceable, including restrictions on territory and a grace period for termination of the agreement.

Standards

Hong Kong recognizes international standards. U.S. companies seeking to export to Hong Kong should check with potential agents and customers to determine exact standards required.

Learn more about how we promote U.S. products and services in Hong Kong by visiting our website at www.BuyUSA.gov/hongkong or by contacting us at Hong.Kong.Office.Box@mail.doc.gov.